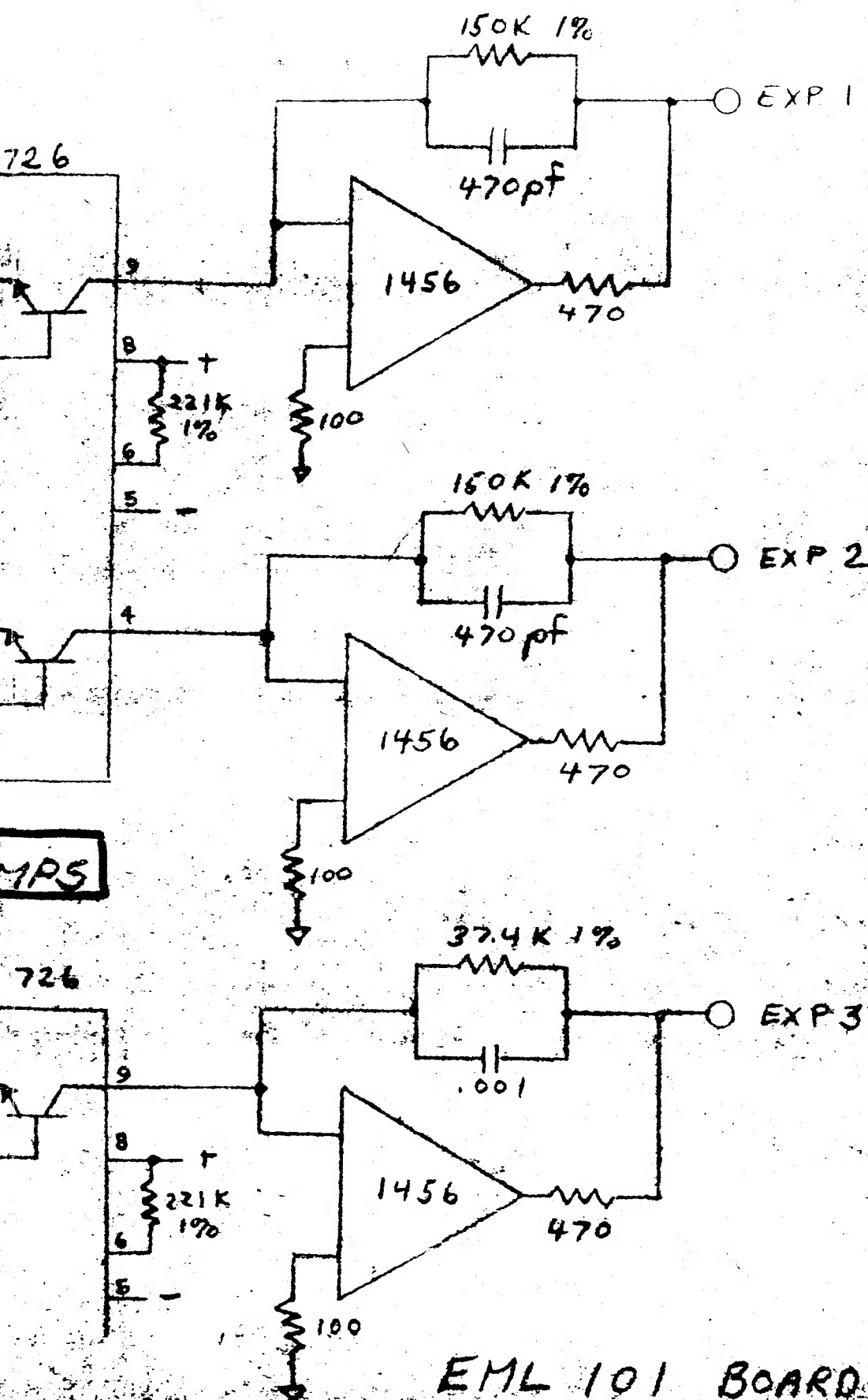
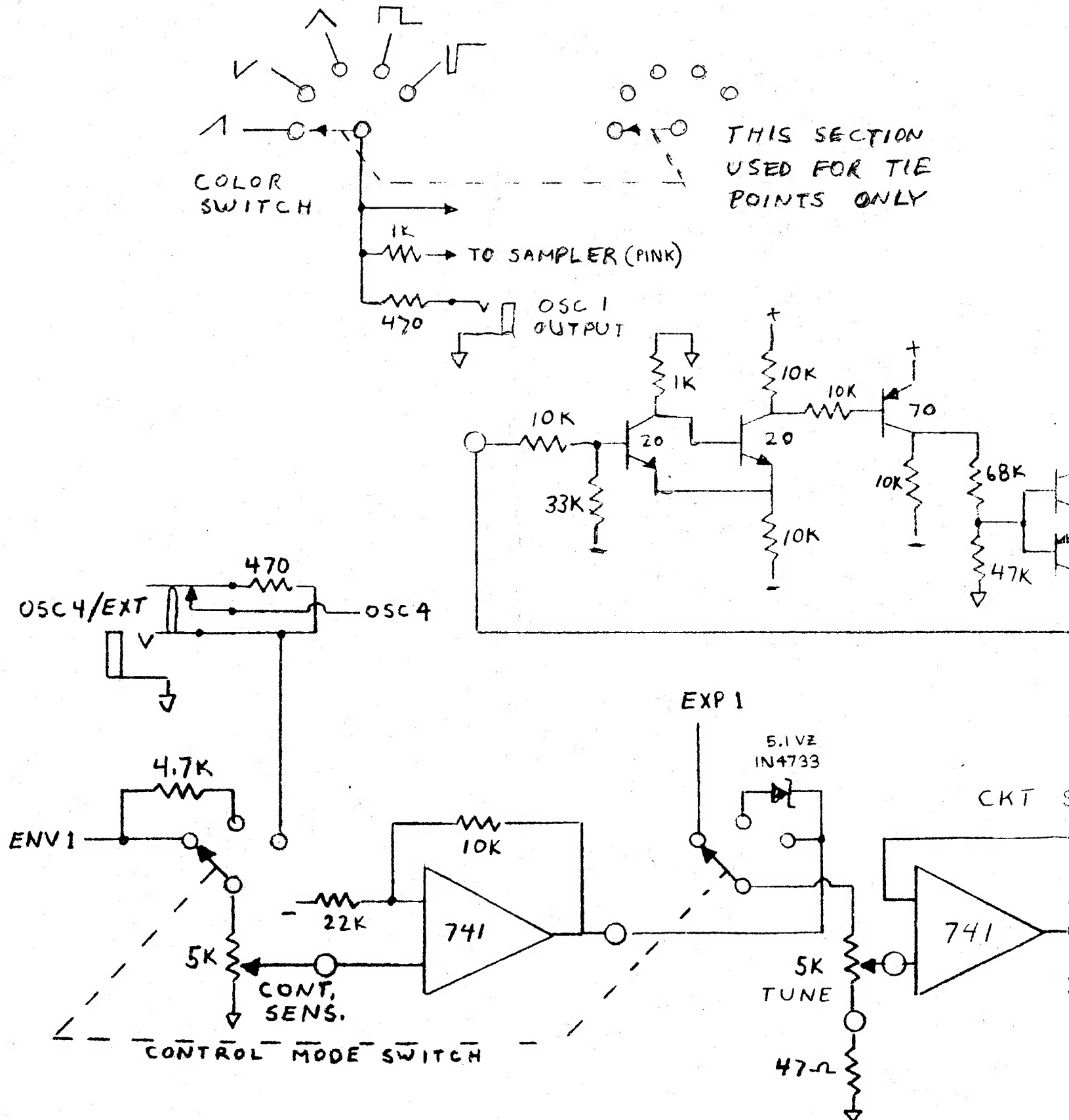


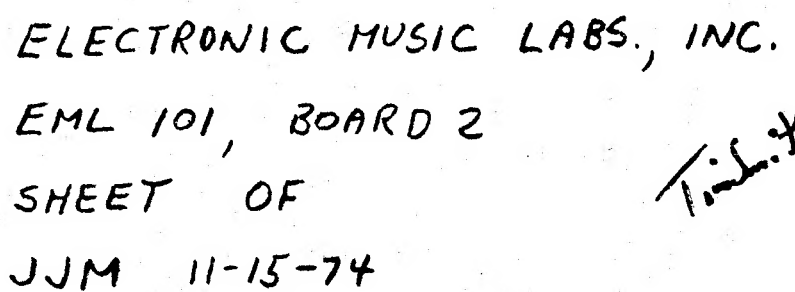
Tim Smith (3)



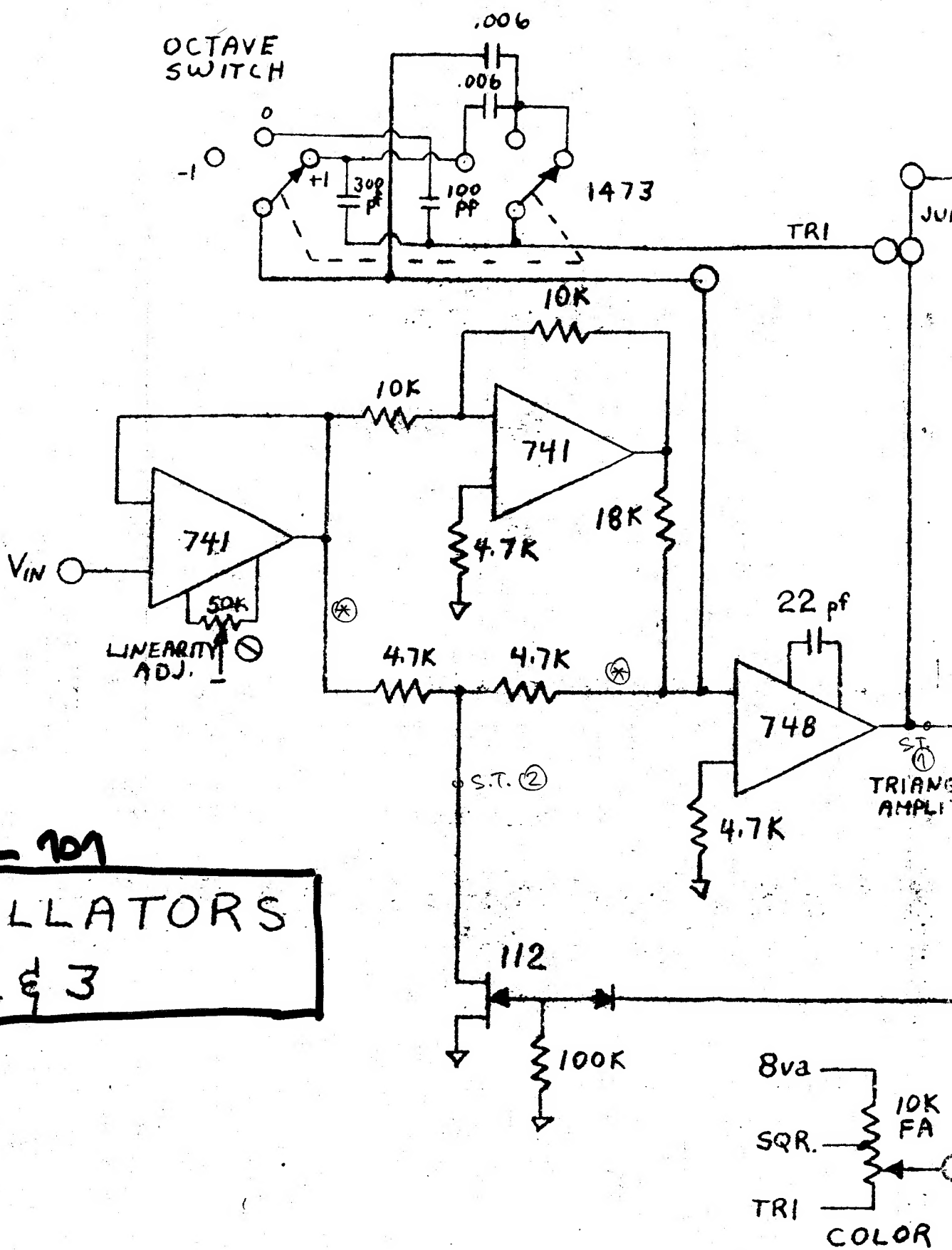
EML 701

# OSCILLATOR NO. 1





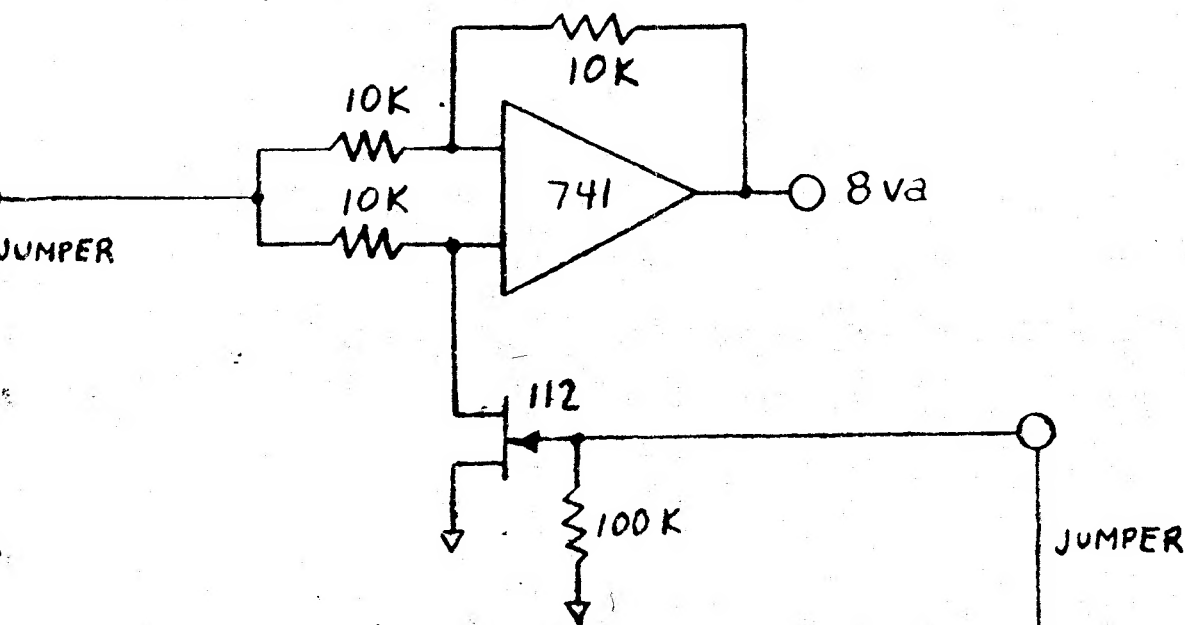
OCTAVE  
SWITCH



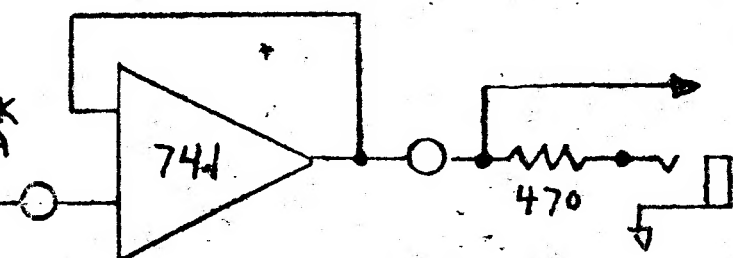
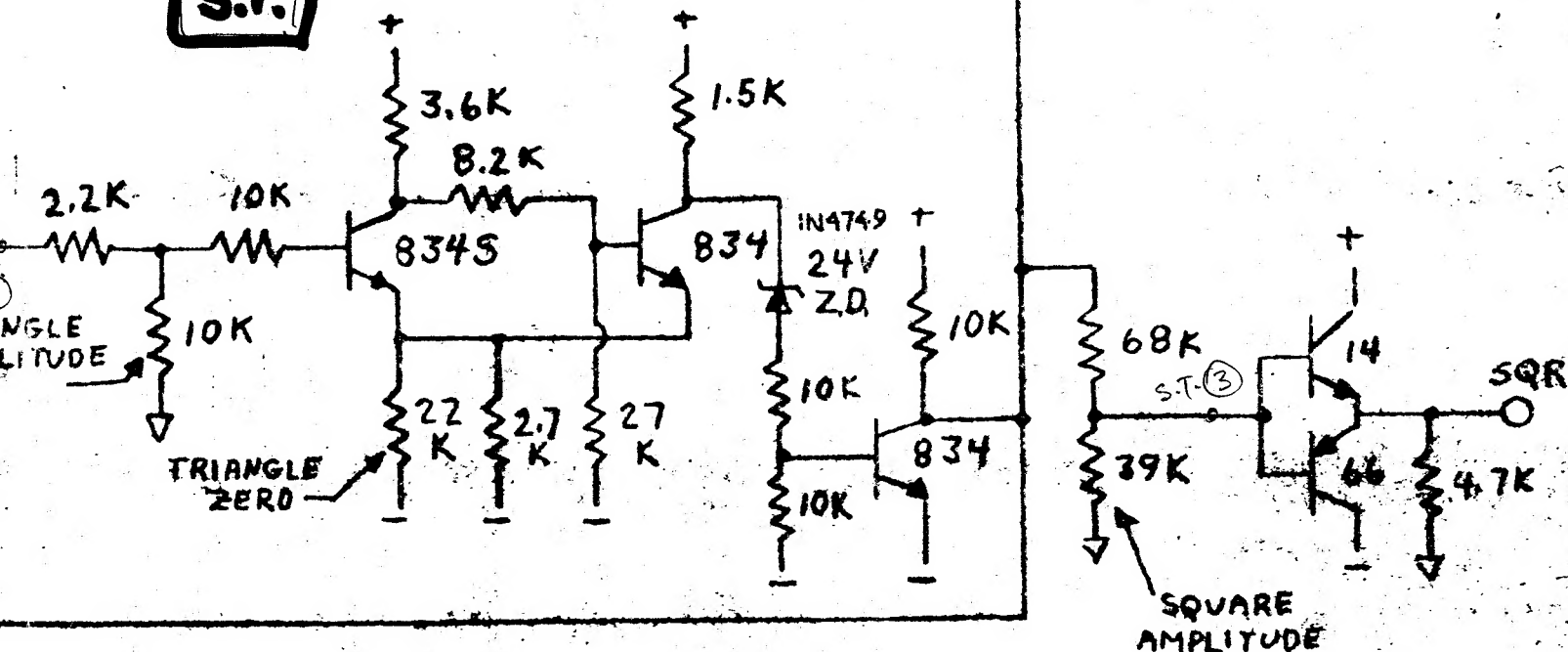
EML 101

OSCILLATORS

2 & 3

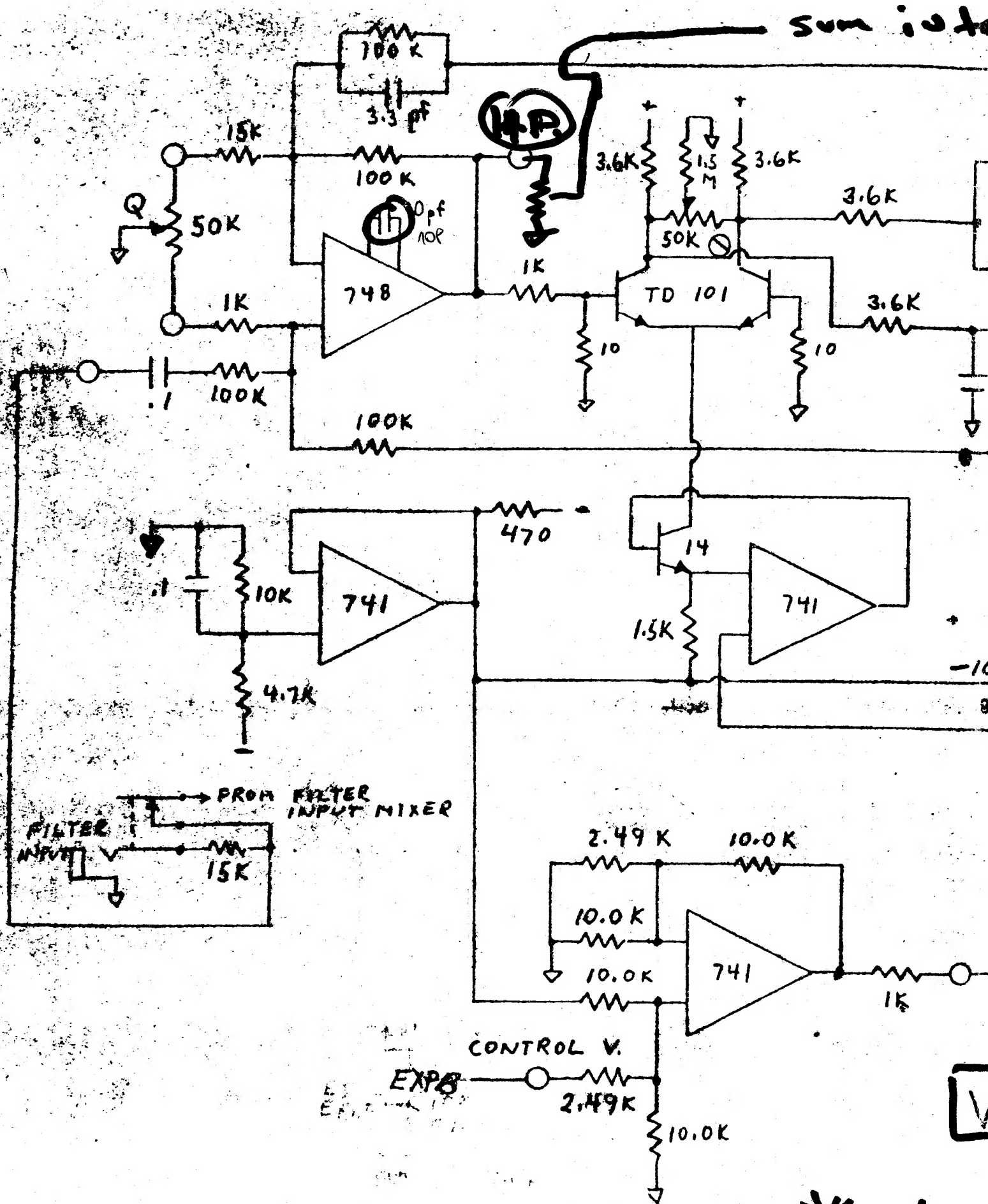


**S.T.**



OSCILLATOR  
OUTPUT

ELECTRONIC MUSIC LABS, IN  
EML 101 , BOARD 2  
SHEET OF  
11-5-74 J.J.M.



\* Change  
IC's to

The diagram illustrates a multi-mode filter circuit. At the top, a 748 op-amp is configured as a buffer for the B.P. (Band Pass) input, with a feedback capacitor of 0.006  $\mu$ F and a gain of 10. Its output is connected to the non-inverting input of a 741 op-amp. The 741 op-amp is configured as a multi-mode filter with a feedback resistor of 10K. The input to the 741 is a sum of signals: the B.P. input (via a 10K resistor), the H.P. (High Pass) input (via a 10K resistor), and the output of the 748 (via a 10K resistor). The 741's output is connected to a 470  $\Omega$  resistor, which is then connected to the filter output. The circuit is powered by a -10V line, which is derived from a 92VZ diode connected to an 8VZ diode. The 741's non-inverting input is biased at -5V using a voltage divider consisting of a 4.7K resistor and a 2.2K resistor. The 748's non-inverting input is also biased at -5V using a voltage divider consisting of a 6.8K resistor and a 50K resistor. The 741's output is also connected to a 10K resistor, which is connected to the filter output. The 741's output is also connected to a 10K resistor, which is connected to the filter output. The 741's output is also connected to a 10K resistor, which is connected to the filter output.

VCF

351 H or Equiv.

JJM 11-15-74